

REMARKS

Reconsideration and allowance of the subject application are respectfully requested.

Upon entry of this Amendment, claims 1-15 are pending in the application. In response to the August 26, 2004 Office Action, Applicant respectfully submits that the pending claims define patentable subject matter.

The Examiner indicates that the August 26, 2004 Office Action is made final because the June 8, 2004 Amendment necessitated the new grounds of rejection in the Office Action. However, the amendments to independent claim 1 were merely grammatical/stylistic in nature and did not change the scope of the claim.¹ Therefore, Applicant requests that the Examiner withdraw the finality of the present Office Action.

Claims 1-7 and 10-12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles et al. (U.S. Patent No. 5,917,822; hereafter "Lyles") in view of newly cited Teraslinna (U.S. Patent No. 5,812,525; hereafter "Teraslinna"). Claims 8 and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles in view of Teraslinna and Ding et al. (U.S. Patent No. 5,699,361; hereafter "Ding"). Claims 13 and 15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Lyles. Claim 14 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Lyles and Ding. Applicant respectfully traverses the prior art rejections.

¹ As set forth in MPEP 706.07(a), "second or any subsequent actions on the merits shall final, except where the examiner introduces a new grounds of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 C.F.R. § 1.97(c) with the fee set forth in 37 C.F.R. § 1.17(p)."

With regard to independent claims 1 and 7, the Examiner states that “it is not clear whether Lyles teaches that the allocation of resources by the management unit is independent of the number of connections of each terminal, and each terminal includes means for allocating resources to each connection according to the overall resources allocated to the terminal by the management.” However, the Examiner asserts that it would have been obvious to modify Lyles to include these features in view of the alleged teachings of Teraslinna “for the purpose of assigning and associating bandwidth as well as in order to dynamically assign the bandwidth to each of the connections based on the need.”

Teraslinna discloses a method and system for resource management in a fast packet switching communication network, wherein a fast packet switch is used for providing a virtual connection between selected pairs of endpoints. A bandwidth constraint based upon the source endpoint, but independent of the destination endpoint, is enforced for a received packet containing an address field identifying a source endpoint and a destination endpoint. In a communication network wherein a plurality of virtual connections are provisioned from a single source endpoint to a plurality of destination endpoints, the bandwidth constraint is associated with bandwidth usage over all of the virtual connections.

However, neither Lyles nor Teraslinna discloses that “each terminal includes means for allocating the resources to each connection according to the overall resources that are allocated to said terminal and a weighting coefficient allocated to each connection of said terminal”, as required by claims 1, 7 and 13. Lyles teaches that the bandwidth allocation unit / head-end controller (which the Examiner asserts corresponds to the claimed management unit), rather than

the network access units / terminal equipment units (which the Examiner asserts corresponds to the claimed terminals), uses a weighted fair queuing algorithm or a virtual clock algorithm to generate a sequence of upstream slot/transmission assignment grants which the bandwidth allocation unit can transmit downstream to the requesting network access unit. That is, Lyles does not appear to disclose that the network access units / terminal equipment units utilize weighted fair queuing for allocating the resources to each connection of the terminal. Further, Teraslinna simply discloses a bandwidth constraint is enforced based upon the source endpoint independent the number of virtual connections emanating from the source endpoint of the destination endpoint.

With regard to dependent claims 8, 9 and 14, the Examiner again cites Ding (col. 18, line 66 - col. 19, line 18) for transmitting resource allocation signals which indicate the number of packets to be transmitted for each transmit channel. However, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to modify the network/method of Lyles based on the teachings of Ding to produce the claimed invention. In particular, Ding is directed to allocating channels in a host computer (i.e., node) as needed by application programs running on a processor of the host computer. Accordingly, the resource allocation signal of Ding is transmitted by an application to a (streamer) process running on the host computer. On the other hand, Lyles teaches transmitting a transmission authorization request signal from a terminal unit to a head-end unit. Thus, Applicant respectfully submits that the teachings of Ding relied on by the Examiner are not related or relevant to the system/method of Lyles or the present invention.

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Accordingly, Applicant respectfully submits that independent claims 1, 7 and 13, as well as dependent claims 2-6, 8-12, 14 and 15, should be allowable over Lyles and Teraslinna because the cited references, alone or in combination, do not teach or suggest all of the features of the claims.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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